



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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May 20, 2008

Mike Spaits
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SUBJECT: Draft Environmental Impact Statement for the Proposed Implementation of the Base Realignment and Closure (BRAC) 2005 Decisions and Related Actions at Eglin Air Force Base, Florida; CEQ Number 20080115

Dear Mr. Spaits:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced Draft Environmental Impact Statement (EIS) in accordance with its responsibilities under Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act (NEPA). The United States Air Force (USAF) proposes to implement several actions related to the 2005 Base Realignment and Closure (BRAC) recommendations associated with Eglin Air Force Base (AFB) in Okaloosa, Santa Rosa, and Walton Counties, Florida. The specific actions that form the basis for this EIS include: 1) relocation of the Army 7th Special Forces Group (7SFG) Airborne (A) from Fort Bragg, North Carolina; and 2) establishment of the Joint Strike Fighter (JSF) Initial Joint Training Site (IJTS) at Eglin AFB. The JSF IJTS would include conducting initial graduate-level pilot training for the Navy, Marines, and Air Force associated with introduction of the new F-35 aircraft at Eglin AFB. The establishment of the JSF IJTS would require relocation of instructors and maintenance personnel from five military bases across the country to Eglin AFB.

The Eglin Military Complex occupies much of northwestern Florida, east of Pensacola. It comprises approximately 724 square miles (mi²) of land area, often referred to as the Eglin Reservation, and nearly 130,000 mi² of airspace overlying land and water ranges. Approximately 2.5 percent of the airspace is over land and the remaining 97.5 percent is over water. The charted airspace is above the land that is Eglin AFB and extends to the east, south, and to the north into Alabama over private lands. Contained within the 724 mi² Eglin Reservation are 17 miles of barrier island coastline on Santa Rosa Island (Okaloosa and Santa Rosa Counties), of which 13 miles are closed to the public.

The proposed action would locate new missions at Eglin AFB and increase Eglin's personnel and military activities over the next several years. The Air Force, Army, Navy, and Marine Corps identified four separate but interrelated activities to implement the Eglin BRAC recommendations: 1) a new cantonment area for the 7SFG(A); 2) range training areas for the 7SFG(A); 3) a new cantonment area for the JSF IJTS; and 4) flight training areas for the JSF.

All activities would occur on the Eglin Reservation or within airspace associated with Eglin AFB or the Department of Defense. The total personnel gain at Eglin AFB due to the proposed action would be approximately 4,526, including military personnel and civilian employees.

Five proposed alternative cantonment locations have been identified with sub-alternatives for Alternatives 1 and 2 to accommodate the 7SFG(A) at Eglin AFB. Approximately 5.1 million square feet (ft²) of buildings and hard surfaces would be constructed from 2008 through 2011. Training would consist of ground maneuvers on foot or with light-duty vehicles. Range training would require maneuvers with bivouac locations. Such maneuvers would not be compatible with other users and public access would not be permitted. Air transport and zodiac-type boat infiltrations would also be included in mission training. Five proposed alternative locations are also considered for new 7SFG(A) dedicated ranges. Other firing ranges would be located in areas on the Eglin Reservation where live-fire currently occurs.

A total of 107 F-35 primary assigned aircraft are proposed for JSF IJTS training missions at Eglin AFB. Delivery of F-35s at Eglin AFB would begin in 2010 and would be completed in 2016. A separate cantonment area is required to accommodate JSF personnel. Two locations on the Eglin Main Base are proposed as operationally reasonable alternatives for the JSF IJTS cantonment. The new cantonment area would include renovation of existing facilities and/or construction of new facilities, depending on the alternative selected. Some building demolition would also be required. The JSF IJTS construction is proposed to begin in 2009 and conclude in 2015. A munitions storage area would be the same for either alternative and would require expansion of the existing munitions storage area.

Two flight training alternatives, representing a range of possible training requirements and locations, were considered in the Draft EIS. These two alternatives provide for a different mix of operations at each of three airfields: Eglin Main, Duke Field, and Choctaw Field. Each of the alternatives considers Eglin as the Main Operating Base from which aircraft depart for training activities (departures) and terminate their training activities (terminations). Regardless of the alternative selected, the total number of flight operations should more than double with the F-35 beddown at Eglin AFB as compared to existing conditions. It is anticipated that as the JSF program evolves and matures at Eglin AFB, elements of the program may change. Consequently, the JSF will adaptively manage program issues over time throughout the delivery and basing of the aircraft through approximately 2020.

Based on our review of the Draft EIS, EPA has environmental concerns associated with the proposed action. Development activities have the potential to directly and/or indirectly affect aquatic habitats, wetlands, water quality associated with clearing operations and construction, and the development of new stream/wetland crossings. In addition, this project would adversely affect several federal- and state-listed endangered, threatened and sensitive species. EPA recommends that the USAF consider Alternative 1 (and its sub-alternatives) for the siting of the 7SFG(A) Cantonment Area. This alternative appears to have less overall impacts associated with land clearing; less overall air emissions associated with construction and long-term operations; less impacts to biological resources, including threatened and endangered species; and less impacts to utilities, particularly for potable water since usage would be within permitted limits

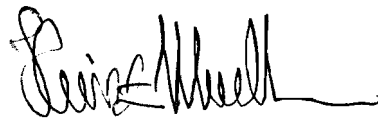
and would not require an additional or expanded potable water system.

EPA also has concerns that the establishment of the JSF IJTS and expansion of training operations associated with this proposal may increase impacts beyond Eglin AFB's boundaries, particularly related to potential changes in air quality and extensive noise exposure. To minimize overall on- and off-base noise impacts, EPA recommends selection of JSF Flight Training Alternative 1. In addition, it appears there is the potential for disproportionately high and adverse human health or environmental effects of this project on minority and/or low-income populations, primarily associated with dramatic increases in noise levels in these communities. To mitigate for these impacts, EPA recommends minimization or discontinuation of the use of the special use airspace and military training route areas that have the greatest potential for disproportionate impacts to low-income and minority communities as practicable.

EPA also recommends several actions that Eglin AFB could implement during construction and long term operations to assist the area in meeting air quality standards in the future. EPA supports a comprehensive monitoring program to ensure that the ongoing impacts from military training are assessed and appropriately addressed/mitigated once identified. In addition, the specific Best Management Practices (BMPs) identified in the Draft EIS should be applied and adequately enforced to attain appropriate results.

EPA rates the Draft EIS EC-2 (Environmental Concerns-with more information requested). Enclosed are definitions of EPA ratings. Also enclosed are Specific Review Comments which provide greater detail regarding environmental concerns, additional information being requested, and EPA recommendations to address these concerns. We appreciate the opportunity to review the proposed action. Feel free to contact me at (404) 562-9611 or Ben West of my staff at (404) 562-9643 if you have any questions or want to discuss our comments further.

Sincerely,

A handwritten signature in black ink, appearing to read "Heinz Mueller", with a long horizontal flourish extending to the right.

Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

Enclosures

U.S. ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL IMPACT STATEMENT (EIS) RATING SYSTEM CRITERIA

EPA has developed a set of criteria for rating Draft EISs. The rating system provides a basis upon which EPA makes recommendations to the lead agency for improving the draft.

RATING THE ENVIRONMENTAL IMPACT OF THE ACTION

- LO (Lack of Objections): The review has not identified any potential environmental impacts requiring substantive changes to the preferred alternative. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposed action.
- EC (Environmental Concerns): The review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact.
- EO (Environmental Objections): The review has identified significant environmental impacts that should be avoided in order to adequately protect the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). The basis for environmental objections can include situations:
 1. Where an action might violate or be inconsistent with achievement or maintenance of a national environmental standard;
 2. Where the Federal agency violates its own substantive environmental requirements that relate to EPA's areas of jurisdiction or expertise;
 3. Where there is a violation of an EPA policy declaration;
 4. Where there are no applicable standards or where applicable standards will not be violated but there is potential for significant environmental degradation that could be corrected by project modification or other feasible alternatives; or
 5. Where proceeding with the proposed action would set a precedent for future actions that collectively could result in significant environmental impacts.
- EU (Environmentally Unsatisfactory): The review has identified adverse environmental impacts that are of sufficient magnitude that EPA believes the proposed action must not proceed as proposed. The basis for an environmentally unsatisfactory determination consists of identification of environmentally objectionable impacts as defined above and one or more of the following conditions:
 1. The potential violation of or inconsistency with a national environmental standard is substantive and/or will occur on a long-term basis;
 2. There are no applicable standards but the severity, duration, or geographical scope of the impacts associated with the proposed action warrant special attention; or
 3. The potential environmental impacts resulting from the proposed action are of national importance because of the threat to national environmental resources or to environmental policies.

RATING THE ADEQUACY OF THE ENVIRONMENTAL IMPACT STATEMENT (EIS)

- 1 (Adequate): The Draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.
- 2 (Insufficient Information): The Draft EIS does not contain sufficient information to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the Draft EIS, which could reduce the environmental impacts of the proposal. The identified additional information, data, analyses, or discussion should be included in the Final EIS.
- 3 (Inadequate): The Draft EIS does not adequately assess the potentially significant environmental impacts of the proposal, or the reviewer has identified new, reasonably available, alternatives, that are outside of the spectrum of alternatives analyzed in the Draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. The identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. This rating indicates EPA's belief that the Draft EIS does not meet the purposes of NEPA and/or the Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised Draft EIS.

**Draft Environmental Impact Statement for the Proposed Implementation of the Base
Realignment and Closure 2005 Decisions and Related Actions
at Eglin Air Force Base, Florida**

SPECIFIC EPA REVIEW COMMENTS

Alternatives

The Draft EIS identifies a preferred alternative for all of the activities except the JSF Flight Training. This will be identified in the Final EIS. The preferred 7SFG(A) Cantonment Area is identified as Alternative 3: West of Duke Field; the preferred 7SFG(A) Range Area is identified as Alternative 3: East and West Side; and the preferred JSF IJTS Cantonment Area is identified as Alternative 1: 33rd Fighter Wing Area. However, it is unclear from the Draft EIS why these alternatives have been selected as the preferred alternatives. EPA recommends that the Final EIS include a more detailed discussion of the evaluation criteria and rationale that supports selection of these areas as preferred for the purposes of siting the cantonment areas or field training areas.

In particular, EPA recommends that the USAF reconsider Alternative 1 (and its sub-alternatives) for the siting of the 7SFG(A) Cantonment Area. This alternative appears to have less overall impacts associated with land clearing; less overall air emissions associated with construction and long-term operations; less impacts to biological resources, including threatened and endangered species; and less impacts to utilities, particularly for potable water since usage would be within permitted limits and would not require an additional or expanded potable water system. Furthermore, Alternative 1 locations would have less impacts and conflicts with existing and future recreation uses, as compared to the other 7SFG(A) Cantonment Area alternatives.

Environmental Justice

The Draft EIS does a good job of evaluating the potential environmental impacts to low-income and minority communities immediately adjacent to Eglin AFB using census information from the 2000 U.S. Census at the block group and block level. This also includes impacts associated with expanded airspace and military training routes to support the JSF flight training program. Based on this analysis, it appears there is the potential for disproportionately high and adverse human health or environmental effects of this project on minority and/or low-income populations, primarily associated with dramatic increases in noise levels in these communities. Therefore, EPA recommends that the Final EIS include some additional field work to verify some conclusions using the census data. Field verification should include an assessment of impacts (e.g., noise exposure) to identified residences within low-income and minority communities, instead of relying on percentages of block groups or other mapping units and should assist in quantifying the potential for disproportionate impacts to these communities. To mitigate for these impacts, EPA recommends minimization or discontinuation of the use of the special use airspace and military training route areas that have the greatest potential for disproportionate impacts to low-income and minority communities. Further comments on noise mitigation are included below.

Traffic

The Draft EIS concludes that there would be severe traffic impacts resulting from implementation of the BRAC relocation actions. Based on the significant increase in numbers of intersections that are failing (LOS E or F), EPA has concerns about localized carbon monoxide (CO) hot-spots that would be created as a result of the proposed action. EPA's primary concern is the lack of any discussion of consideration of alternative transportation management strategies for Eglin AFB to address the transportation system deficiencies that will be created by the BRAC actions. For example, the Draft EIS does not describe any on-base and off-base mass transit options for Eglin employees and families. The Draft EIS does suggest that, "Other improvements that should be considered include CMS and TSM projects, a corridor management plan that looks at access along the corridor, and transit improvements." Given the potential air quality concerns associated with significant transportation deficiencies, EPA recommends that Eglin develop a comprehensive alternative transportation program, especially for commuters. This program should promote telecommuting, the use of mass transit, and car pooling, and establishing no-cost or low-cost mass transit (possibly hybrid electric or natural gas powered) between popular points on the base and in the surrounding communities. This initiative could be similar to those programs developed by other military installations, such as Fort Bragg and Camp Pendleton. By providing useable and convenient alternatives to driving, these installations have made significant steps towards helping the areas maintain or improve air quality as well as improving level-of-service problems at key intersections by decreasing the expected traffic demand. This type of program would benefit the environment while simultaneously providing a benefit for many in the Eglin AFB community.

The Draft EIS briefly mentions a major "Northwest Florida Transportation Corridor" project that is being proposed across Eglin AFB. EPA recognizes that this major transportation project is still in the early planning stages. However, this project will likely have the potential for significant positive and negative impacts to Eglin AFB. It could improve transportation conditions such that some of the proposed roadway projects are no longer required, and it could create conflicts with land use or training operations associated with the BRAC relocations. EPA recommends that the Final EIS disclose the latest information related to this project and include a commitment to revisit the effects of this project on the BRAC relocations as part of the overall adaptive management strategy once the project is further along in the development phases.

Noise

Section 7.3 discusses the noise impacts associated with the no action alternative and the various action alternatives at Eglin AFB. The noise environment both on-base and off-base is projected to increase significantly due to an increase in the level of operations and the introduction of the F-35 aircraft, which is a much louder aircraft than the F-15 aircraft. Off-base populations subject to noise levels of 65 decibels (dB) day-night average sound level (DNL) or greater are estimated to increase from the baseline of 2,113 persons to 6,757 persons for JSF Flight Training Alternative 1 and 11,156 for Alternative 2. The estimated population affected by greater than 75 dB DNL would increase from the baseline of 142 to 2,174 persons for JSF Flight

Training Alternative 1, and 2,721 for Alternative 2. The Draft EIS also identifies a number of noise sensitive land uses on-base and off-base (e.g., residences, hospital, schools, and child development centers) that will be exposed to incompatible noise levels. Under implementation of either JSF flight training alternative, special risks to children are anticipated in the form of increased difficulty in learning at several schools impacted by high noise levels. There are five schools in the Okaloosa County School District that would potentially be affected by noise levels of 65 dB DNL and above, as well as four daycare centers.

In addition, the areas in which the new construction projects (e.g., dormitories and unaccompanied housing) for the cantonment areas are proposed to occur are frequently subjected to high levels of aircraft noise. EPA's primary recommendation would be to relocate these noise sensitive receptors outside of these incompatible noise zones as part of the final siting and design process. However, EPA understands the land use constraints for siting alternatives based on existing and future training requirements. Therefore, EPA recommends that the Air Force strongly consider the use of sound-proofing and other sound insulation measures in new building construction and retrofitting existing buildings to reduce interior noise levels and minimize the impacts of noise exposure in these noise sensitive sites, especially for new residences, hospitals, schools, and child development centers. Including these measures as part of new construction would likely be less expensive than retrofitting the same buildings at a later point in time.

EPA also recommends that any residences exposed to noise levels within the 75+ DNL contours be acquired from willing seller residents to help mitigate such noise exposure. EPA supports development of land use plans and ordinances for lands outside Eglin AFB, in coordination with local governments, to limit possible future complaints from developers and or businesses not compatible with Eglin AFB operations. EPA suggests that Eglin AFB utilize a noise complaint system for affected residents to report any noise complaints or other incidents. Also, EPA recommends that periodic noise monitoring occur with such a frequency to determine any expansion ("creep") of the noise contours over time and possible incorporation of additional residences as part of an adaptive management protocol.

Air Quality

The Draft EIS considers only criteria air pollutants and potential impacts of the National Ambient Air Quality Standards (NAAQS). Criteria pollutants are important, affecting air quality over a large region. However, the Draft EIS does not address hazardous air pollutants or "air toxics" which can cause cancer and other serious health effects among people living or working in the vicinity of the sources. The BRAC relocation at Eglin AFB will involve mobile sources (transportation, training, construction, and service vehicles), area sources, and indoor sources that will emit air toxics in the vicinity of significant numbers of people who work, live, attend school or day care facilities, or are hospitalized at Eglin AFB. Area and mobile sources contribute significantly to the nationwide risk from breathing outdoor sources of air toxics, according to EPA's National-Scale Air Toxics Assessment for 1999 (the most recent assessment available - visit <http://www.epa.gov/ttn/atw/nata1999>). Indoor sources of air toxics are particularly important, given that people spend about 90 percent of their time indoors, leading to long

exposure times. Therefore, EPA recommends that the Final EIS address ways to reduce or mitigate the impact of these emissions on people.

EPA published a final rule in February 2007 addressing the control of hazardous air pollutants from mobile sources. That rule provides new standards for exhaust and evaporative emissions from passenger vehicles, new limits on the benzene content of gasoline, and standards for portable fuel containers that will reduce emissions of toxics from gas cans that can be found in many garages. Details concerning this rule can be found in the Federal Register, Volume 72, Number 37, February 26, 2007, Page 8428. Looking beyond these regulations, there are numerous actions that Eglin AFB could take to reduce exposures from mobile sources. For example, Eglin AFB could establish anti-idling policies for trucks; retrofit diesel engines to reduce emissions; require that all construction diesels be retrofitted; and promote alternative transportation management options.

Area sources are the numerous, smaller sources that support populations, for example gas stations, dry cleaners, vehicle refinishing shops and paint stripping operations, electroplating shops, hospital sterilizers, incinerators, solvent cleaners, boilers, medical waste incinerators, and many others. Some area sources are already covered by regulations; others will soon be subject to regulations. Several suggestions for reducing emissions from area sources are included in Healthy Air – A Community and Business Leaders Guide (<http://www.epa.gov/air/toxicair/guide.html>). Suggestions in this guide would not only help to reduce emissions of air toxics, but also improve efficiency and cut costs.

Indoor sources of air toxics are particularly significant because the typical person spends 90 percent of his/her time indoors. The Draft EIS does not include a discussion of building construction practices for proposed new military construction. EPA recommends that all vertical building construction projects attempt to follow the Leadership in Energy and Environmental Design (LEED) Green Building Rating System to become LEED certified in accordance with the U.S. Green Building Council. The LEED program promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. Indoor environmental quality should be a priority in these buildings, as much as practicable. EPA also suggests that the Army consult EPA's Indoor Air Quality website (www.epa.gov/iaq) for suggestions on how to reduce indoor pollution sources.

The Draft EIS identifies significant emissions of particulate matter (PM) associated with construction and long-term operations. In light of these increased emissions, EPA recommends that Eglin AFB prevent potential violations of the appropriate PM standards in the future by implementing several actions during construction and long term operations associated with the BRAC relocation activities. Examples of actions that could be undertaken include:

- Develop a phased initiative to switch all non-tactical vehicles to run on biodiesel. Changes to 20 percent biodiesel/ultra-low sulfur diesel (ULSD) blend can reduce PM_{2.5} emissions by up to 30 percent. In addition, biodiesel has the additional benefits of a linear decrease in polycyclic aromatic hydrocarbon (PAH) emissions (air toxics) and a decrease

in toxicity. B100 fuel does not require DOT hazardous material designations.

- Establish policies that all construction equipment operated on the installation shall operate on a minimum of B20 fuel. These policies will help decrease the emissions from construction related activity that will occur during the crucial air quality period prior to official designations of attainment/nonattainment in 2010. EPA recommends that this should be done prior to the letting of construction contracts in order for these potential costs to be included in bid specifications (at current rates B20 is cheaper than ULSD in some areas).
- Develop construction bid specifications that require contractors to use diesel equipment that meets a minimum Tier 2 designation or retrofit existing equipment to achieve a minimum of 20 percent reduction in PM_{2.5} emissions.
- Develop a comprehensive alternative transportation program (see previous comments on traffic).

Overall, EPA proposes an approach for Eglin AFB that focuses on the opportunity to proactively implement some strategies that can reduce particulate pollution. EPA recommends that Eglin AFB consider and implement all reasonable and appropriate measures to reduce/prevent emissions from the construction and operation activities. EPA Region 4 staff are able to assist Eglin AFB in implementing reasonable and appropriate measures to mitigate for the potential air quality impacts of the proposed action.

Wetlands/Water Quality Impacts

Wetland permits and possible mitigation activities will be defined prior to construction of any projects affecting jurisdictional wetlands in accordance with the regulatory requirements of the U.S. Army Corps of Engineers (USACE). As the overall project continues into later design phases, EPA recommends consideration of design modifications, as appropriate, to further minimize the impacts of individual projects to jurisdictional waters, including wetlands. EPA reiterates that any land clearing operations involving vegetation removal with mechanized equipment such as front-end loaders, backhoes, or bulldozers with sheer blades, rakes or discs in wetlands; or windrowing of vegetation, land leveling, or other soil disturbances are considered placement of fill material in wetlands and would likely require a permit. Any unavoidable wetland impacts should preferably be mitigated within the same watershed to result in no net loss of aquatic functions, not just wetland acreage. Although we understand the final mitigation plans cannot be prepared until later in the design process, EPA recommends that Eglin AFB should consider potential mitigation needs for the different alternatives.

EPA has concerns about degradation of water quality in various waterways from sediment and other pollutants. The Draft EIS identifies potential impacts resulting from erosion of disturbed soils. Soil loss and soil erosion could greatly increase due to extensive land clearing and construction activities. Cut and fill activities and construction equipment usage, specifically heavy earth-moving equipment, could result in soil loss due to wind erosion and soil compaction. All appropriate steps should be taken to address potential impacts to water quality within streams and wetlands. Mitigation measures related to protection of water quality should be

tailored depending on the condition of the specific water resource as well as the severity of the potential impacts. Specifically, those waterbodies not currently meeting their designated uses should receive additional protection to ensure that water quality problems are not exacerbated. Monitoring commitments should be included to ensure that water quality and in-stream habitat are fully protected. Stormwater controls (*e.g.*, silt fences and hay bales) should be monitored and replaced periodically for the duration of construction to help ensure success. Specific comments on the proposed mitigation and monitoring plan are included below.

Water Use

The Draft EIS stated that Eglin AFB would be required to conduct an industrial water use survey to document industrial processes and equipment that utilize water and to quantify the associated water usage rates. A variety of methods would be used to collect and verify data, such as interviews, survey forms, and comparison of reported water usage rates with historical water usage data. Based upon the types and amounts of industrial water use identified, a preliminary evaluation of potential options to reduce the water usage for industrial processes would be performed. Potential options to be considered may include, but are not limited to, process changes, new technologies, maintenance practices, and alternate sources of water. The Industrial Water Use Audit Report is expected to be completed by January 2008 and would include options for reducing the use of potable water. Has this audit/survey been completed? If so, this information should be included in the Final EIS, including commitments to implement measures to reduce water usage for industrial processes.

Monitoring/Adaptive Management

EPA supports the need for a comprehensive monitoring program to ensure that the ongoing impacts from military training are assessed and appropriately addressed/ mitigated once identified. Monitoring results should inform the adaptive management protocols discussed in the Draft EIS. EPA recommends use of integrated training area management tools and programs to manage resources and to minimize impacts to the environment (associated with training and operations). It is unclear what types of similar programs are currently employed at Eglin AFB. EPA supports adoption of programs that include on-the-ground damage inspections followed by damage assessments and repair to assist in developing long-term mitigation for continuing operations. EPA also supports implementation of the specific Best Management Practices (BMPs) identified in the Draft EIS. These practices should be applied and adequately enforced to attain appropriate results.

One additional issue related to monitoring that is not discussed in detail in the Draft EIS is the concept of reporting and adaptive management. The Draft EIS suggests that the Eglin AFB will utilize monitoring and adaptive management to allow for changes to the proposed action in the future. The Draft EIS states, "The F-35 is a new weapon system which will evolve with time. Adaptive management will permit modification of management practices to achieve project objectives and environmental protection." By using this approach, Eglin AFB should be able to monitor the impacts to the ecosystem and to modify construction or other practices to reduce

these impacts as related to future actions. This adaptive management approach seems very appropriate, especially given the nature and status of the overall JSF program.

There is currently no discussion in the Draft EIS of the process that will be followed to ensure a successful adaptive management approach. EPA recommends that the Final EIS include a thorough discussion of the overall adaptive management plan, including the monitoring protocol and who will be involved in making adaptive management decisions based on the monitoring results. EPA suggests that Eglin AFB consider establishing a Natural Resources and Environmental Compliance Partnering Team, if such an entity currently does not exist. This Team would be active in the development of the overall monitoring plan and should be given the opportunity to suggest changes to the project as new information is discovered in accordance with the overall adaptive management concept.